Justin Tsai

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WORK EXPERIENCE

CPP Virtual Reality Lab   Pomona, CA

Administrator   Aug 2018 - Present

- Lead and manage groups of students to develop VR/AR projects for presentation to industry sponsors.
- Mentor students and host workshops and code reviews to teach basic Unity development.
- Work with the HTC Vive Pro, Oculus Rift, and Microsoft HoloLens for all projects.

EDUCATION

California Polytechnic University, Pomona   Pomona, CA

Bachelor of Science, Computer Science   May 2019

GPA: 3.55, Dean's List

PROJECTS

VR Combination and Permutation   C#, Unity

- Collaborated in a team of three to develop a VR research project that tests the player's understanding of math concepts in an escape-room environment.
- Implemented scripts for player movement, controls, audio, and environment interactions.

Isolation   Java

- Created a player vs computer console game coded in Java. The player has to outmaneuver the computer by trapping it with previously made moves.
- Implemented a min-max algorithm utilizing alpha-beta pruning with iterative deepening that the computer uses as a heuristic to make its moves.

VR Wildfire   C#, Unity

- Enhanced an existing VR research project that simulates the player being caught in a wildfire. The project records the users actions in that scenario and the time taken to perform them.
- Debugged errors by analyzing and rewriting existing code from scripts.

UCTRONICS Self-Driving Car   C++, Arduino

- Collaborated in a team of five to develop a self-driving car with line tracking and obstacle avoidance.
- Developed the script for obstacle avoidance and wrote documentation with members.

Spellbreaker VR   C#, Unity

- Developing a single player VR hack and slash game. The player will have to cut through a flurry of magic projectiles aimed at them using their swords.

SKILLS

- **Languages:** Java, C#, HTML, CSS, Javascript, Python, C++
- **Tools**: Unity, Visual Studio, Eclipse, NetBeans, Github Desktop, PuTTy, Android Studio